

50X1

50X1

CENTRAL INTELLIGENCE AGENCY

INFORMATION REPORT

This Document contains information affecting the National Defense of the United States, within the meaning of Title 18, Sections 793 and 794, of the U.S. Code, as amended. Its transmission or revelation of its contents to or receipt by an unauthorized person is prohibited by law. The reproduction of this form is prohibited.

50X1

CONFIDENTIAL

COUNTRY	USSR (Moscow Oblast)	REPORT	
SUBJECT	Information on Infrared Activities at Zavod 393, Krasnogorsk	DATE DISTR.	5 February 1954
DATE OF INFO.		NO. OF PAGES	4
PLACE ACQUIRED		REQUIREMENT	50X1-HUM
		REFERENCES	50X1

THE SOURCE EVALUATIONS IN THIS REPORT ARE DEFINITIVE.
THE APPRAISAL OF CONTENT IS TENTATIVE.
(FOR KEY SEE REVERSE)

50X1-HUM

50X1

CONFIDENTIAL

STATE	#X	ARMY	#X	NAVY	#X	AIR	#X	FBI		AEC						
-------	----	------	----	------	----	-----	----	-----	--	-----	--	--	--	--	--	--

(Note: Washington Distribution Indicated By "X"; Field Distribution By "#".)

50X1

50X1

C O N F I D E N T I A L

REPORT

50X1-HUM

COUNTRY : USSR (Moscow Oblast)

DATE DISTR. 16 Dec. 53

SUBJECT : Information on Infrared Activities at
Zavod 393, Krasnogorsk

NO. OF PAGES 3

50X1-HUM

PLACE
ACQUIREDNO. OF ENCLS.
(LISTED BELOW)

50X1

DATE
ACQUIREDSUPPLEM
REPORT

DATE OF IN

50X1-HUM

THIS IS UNEVALUATED INFORMATION

PROTOCELLS

1. Photocell production was continued in the Soviet laboratory after the move in 1949, as proved by the fact that when the Soviets experienced difficulties in producing their assigned quota they had to turn to the German laboratory for assistance to help them to fulfill this quota. There was one instance in which some glass apparently fractured on exposure to low temperatures in the Soviet laboratory (probably when cells were cooled) and the Soviets came back to the Germans, who then carried on tests on glass bodies in thermos bottles containing liquid air in order to determine whether these glass containers would withstand the shock. Both GOERLICH and EHRMART, the German chief of the electrical laboratory, were involved in this problem. As the difficulties experienced by the Soviet laboratory were solved, the assistance of the German laboratory was no longer required and fabrication of lead sulphide photocells in GOERLICH's section stopped.

C O N F I D E N T I A L

C O N F I D E N T I A L

- 2 -

50X1

BLACK BODIES

2. It is true that black bodies were built, apparently for laboratory use, but I cannot provide information regarding the military type black bodies. I do know that a Soviet woman employee came to make radiation measurements on the black bodies. I saw black bodies made in two different sizes, both with water cooling, six of which were packed in wooden boxes for shipment. 50X1-HUM

FABRICATION OF KRS-5 LENSES

3. KRS-5 crystals were grown by STRAUBEL up to 1949. Reddish crystals were cut into discs by Mr. LOTZ and ground by a Soviet who used special precautions to suck all dust away since the material was poisonous. This Soviet was continuously busy grinding lenses; some of these lenses were 2 cm. in diameter and others may have been larger. The Soviet technician also made measurements on the lenses for conformity to the required curvature. I cannot estimate the number of lenses being made; the largest number I saw there at one time was about five. I believe different types of lenses were made. Actually in the old territory the optical grinding equipment was as the Soviet nachalnik who at one time was a woman and supervised STRAUBEL. After 1949, STRAUBEL could not get any raw material and hence his work on crystal growth stopped. 50X1-HUM

GOERLICH'S POSITION

4. It was learned that the Soviets did not like the first book which GOERLICH wrote there, stating that he had only used old material on facts which were well known to them, and that thus GOERLICH wrote a second version of his book which he took home to Germany. GOERLICH played up to the Soviets and said he enjoyed certain privileges beyond those of the other German scientists. For instance, while everybody else had to wait until a sufficient number of Germans were interested to go to Moscow in a group to visit the library, GOERLICH had a special pass and could visit Moscow any time he pleased. Although GOERLICH was officially 100 per cent Communist, it appeared to me that he was still anxious to go home since he had no means in the USSR to expand his knowledge and felt that his horizon was too narrow and that he did not learn enough about the successes of in his field. Thus in spite of the facilities of the library in Moscow or probably through those facilities he realized he did not learn enough about the latest developments abroad. The entire section which GOERLICH headed was Communist and people avoided contacting them wherever possible. 50X1-HUM

"JUNO" OR KIEL IV EQUIPMENT

5. I recall having seen equipment /what appears to be Kiel IV equipment/ for a period of less than four weeks. The equipment was standing on a table, but unfortunately I cannot remember many details about it. I do remember the tumbling mirror action and the mosaic type dome-shaped front cover which reminded me of an aircraft nose. I also recall the gimbels and gear train, which would have permitted left-right and up-down motion, of the "Eye" (which included mirror and photocell assembly). The diameter of the mosaic dome was approximately 60 cm. I never saw discs having slots on the periphery in. 50X1-HUM

C O N F I D E N T I A L

C O N F I D E N T I A L

- 3 -

connection with this equipment. I am quite sure that this equipment was never built [] and hence must have been built by the Soviet laboratory with the Soviets bringing the equipment to the electrical laboratory for checks, adjustments or repair. At one time Hans WOLLAND, a bright young man who had first been in Moscow and later joined [] mentioned that the equipment was for aircraft installation. WOLLAND had previously worked with the same group which included Herr CORTUM, the gyroscope expert. I understand that WOLLAND left Jena for Berlin in 1952. I supposed he was in [] but am not sure about it. I heard the name "Kielgeraet" [] during this time, but not specifically in connection with the equipment I saw there. I noted: [] was working on small DC motors which were used to tilt, by remote control, equipment mounted on gimbels. The Kiel device uses such motors.

50X1

50X1-HUM

50X1-HUM

50X1-HUM

50X1-HUM

GENERAL CONDITIONS

6. The original Soviet laboratory located in the new territory [] made samples of military equipment. This laboratory moved in the same year to the old territory, where on a parallel basis the first German laboratory was also set up. Many devices which were designed by the Germans were actually built by the Soviet laboratory and this may have happened in the case of the "Juno" or Kielgeraet. I know, for instance, that as soon as the German designers completed the drawings, Soviet female workers transformed these drawings into Soviet type drawings with Russian lettering which were then turned over to the Soviets.

50X1-HUM

50X1-HUM

50X1

7. The electrical laboratory manufactured the small DC motors used for forward and reverse operations in various equipment including aircraft cameras. The same type of motor had been built in Jena during the war. Mr. PRINZ was engaged in work on these motors. The Soviets had also requested [] to review an automatic all-electronic computer for antiaircraft fire direction, which they had obtained. [] Another task on which WOLLAND worked was to make slip-rings. In 1951 the [] worked on a requirement to build two groups of 30 special cameras, each for simultaneous coverage of a number of panel meters at a speed of 24 frames per second.

50X1-HUM

50X1-HUM

50X1-HUM

50X1-HUM

8. At one time [] mechanical parts of a monochromator for infrared. In the cellar of the old building there were dividing engines, but the center of production of grids and reticles was in Kiev. Although Dr. GUNDLACH had used photographic methods to make grids at Sorki, I know that such grids are now being made in Jena by an evaporation process.

C O N F I D E N T I A L